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IN A WEEK'S TIME; SCIENCE PANEL MOVES FROM PARTISAN BICKERING TO COMITY

Through an odd turn of events, Science Committee Democrats were able to declare a rare partial victory in a largely symbolic attempt to pry loose a two-year-old Bush administration study on the impact of US high-tech jobs moving overseas.

Having earlier denounced the Democratic effort as partisan troublemaking whipped up at the request of House Minority Leader Nancy Pelosi (D-CA), committee Chairman Sherwood Boehlert (R-NY) reversed himself, agreeing to support the minority in directing the Commerce Department to release its "offshoring" report. In return, Democrats agreed to drop their procedural maneuver to bring the issue before the full House. And they also agreed not to pursue the issue further if the report is forthcoming.

Led by Ranking Minority Member Bart Gordon (D-TN), Democrats invoked a little-used mechanism to force their demand for the Commerce report onto the committee's agenda. Republicans were confident they would easily quash the maneuver, known as a "resolution of inquiry." Democrats, however, were able to scare up enough of their members to bring a motion to kill the measure to a draw. Tie votes do not carry motions.

The stalemate forced the panel to take up the issue for a second time April 5. Republicans moved to report the resolution without a recommendation, which also has the effect of killing it. This time, Democrats acquiesced. Had the committee simply ignored the resolution, Gordon or another Democrat could have compelled the full House to take up the matter, elevating the issue further. Either way, of course, there was little doubt about the measure's ultimate defeat.

The showdown in the committee was provoked by Gordon, who had been badgering Commerce for more than a year to release the study produced by the agency's Technology Administration (TA). The report was ordered back in 2004, ironically by another Republican, Frank Wolf. As chairman of the relevant Appropriations subcommittee, Wulf also earmarked \$335,000 to pay for it.

The resulting 200-page document generated by TA analysts got swallowed up somewhere along the line—no one seems to know exactly where—in the review process, which officials say included both internal evaluation by other Commerce offices and examination by other agencies. Apart from a dozen-page summary grudgingly released in response to a Freedom of In-

chemist Goverdhan Mehta, who has visited the United States on dozens of occasions, was denied a visa to attend a US scientific meeting. Rather than produce the additional paperwork demanded by the consulate, Mehta, who said he was humiliated by his treatment, dropped his travel plans.

Tony Edson, deputy assistant secretary of state for consulate affairs, told the panel he couldn't comment on Mehta's case specifically, but said that additional documentation is typically required for persons working in "sensitive fields." Edson blamed the long waits in India on the consulates' "tremendous workload," which has been exacerbated by the burgeoning Indian economy. India already is second only to Mexico as a source of US legal immigrants, and is far and away the largest source of temporary workers. It's also the top foreign source of students for US universities, producing 30% more than China.

Since 2002, the department has more than doubled the number of consular officers at Chennai, where the bulk of the additional visa demand has originated. It also instituted a new system in which 30% to 40% of interview appointments are reserved for priority cases—a category that includes students and all business travelers. A large fraction of applicants in Chennai are seeking visas that allow them to work in the United States, he said, including the H-1B mechanism for highly skilled workers. Since there is a greater potential for fraud to occur with work visas, the applications require additional checks.

Edson also pointed to outmoded consular facilities, saying they physically constrained the number of applicants who can be interviewed in a given day. In March, President Bush announced that a new consulate will be built in Hyderabad, India, to help improve the visa flow. It's unclear, however, when the new facility will be completed.

During GAO's six-month period, the average wait for applicants to get an interview in Chennai was 126 days, said Jess Ford, GAO's director of international affairs and trade. In February, nine US consulates worldwide reported wait times in excess of 90 days, including all but one of the four Indian consulates (Calcutta). Chinese applicants have fared much better: the longest wait time reported at the five US consulates there during the review period was 58 days for Shanghai.

Since August 2003, consular officials have been required to interview virtually all applicants for visas and to check their fingerprints against a database of terrorists and other persons ineligible to receive visas. And consular employees who aren't US citizens are no longer allowed to make the decision on whether to issue a visa.

The increased workload and a reduced workforce has caused the delays in Chennai and Mumbai, where waits are only a few days less. Edson acknowledged that hiring retired foreign service officers to supplement the limited corps of career officers who are eligible to process visas would help. He cautioned, however, that the department is limited

there too by salary caps and limits on the number of hours the retirees are allowed to work.

Edson said the State and Homeland Security departments are now jointly exploring the use of digital video interviews and online submission of application paperwork. Collecting that information earlier in the process could speed the interview process, he said.

Ford said that many midlevel consular posts have been left vacant or filled with entry-level officers, resulting in a shortage of persons who have the experience needed to expedite processing. While the adverse impacts of visa processing delays on foreign students, visiting scientists, and high-tech businesses have been extensively aired, the hardships it has caused for the arts have been less documented. World-renowned cellist Yo-Yo Ma told the committee about the case of two Iranian accompanists who had to wait three months, fly to a third country three times, and spend \$5,000 to obtain their visas, despite the fact that it was for their ninth US tour. Other artists, such as Mongolian long-song musicians Zola and Wu Tong, the Chinese Sheng player and singer, often can't get through the gates of the US consulate due to language barriers.

EX-PHYSICS TODAY EDITOR SETTLES WITH AIP OVER HIS 2000 FIRING

A longtime *Physics Today* editor who was fired more than five years ago for boasting that he had written a book on company time has settled his lawsuit with the American Institute of Physics (AIP), owner of the magazine.

"This book is stolen. Written in part on stolen time, that is." So wrote Jeff Schmidt in the introduction to his 2000 book *Disciplined Minds: A Critical Look at Salaried Professionals and the Soul-Battering System That Shapes Their Lives*. Shortly after his bosses read the piece, Schmidt was fired from the job he had held for 19 years.

Following an initial flurry of press coverage and a letter-writing campaign by 1000 scientists and others demanding that AIP reinstate Schmidt, the case quickly faded into obscurity. Schmidt, who doggedly pursued his reinstatement, turned unsuccessfully to the National Labor Relations Board and the Maryland Department of Labor for help. But it was his bringing of a lawsuit in federal court that led to the settlement announced last month.

"This is a victory for free expression and a demonstration of the power of organizing," Schmidt said. While Schmidt is forbidden by terms of the settlement from commenting on the amount, Sanjoy Mahajan, a physicist at Cambridge University who has supported Schmidt throughout his ordeal, has estimated the sum is at least \$500,000. Mahajan specializes in approximation and is writing a textbook for physics students on the subject. He says he calculated that Schmidt's lawyers had sought between \$1 million and \$1.5 million to cover five-and-two-thirds years worth of back pay

and benefits to the date of his firing, compensation for pain and suffering, pay in lieu of reinstatement and other damages. He figures the settlement amount would have been half of that, or between \$500,000 and \$750,000.

Under the agreement, AIP agreed to rehire Schmidt just long enough for him to resign. The organization also agreed to provide an employment reference for him stating that throughout his tenure, Schmidt always met or exceeded job requirements, and that he had received much praise from both his superiors and leading physicists.

Schmidt claims that his admission in the book was meant as hyperbole, and says it offered AIP a pretense to fire him for his frequent advocacy for affirmative actions to bring minorities onto the magazine's staff. While AIP won't comment on the settlement, it insisted in the public settlement agreement that Schmidt was terminated "because he claimed to have written a book on time stolen from AIP." AIP also denied any wrongdoing in the episode.

Documents obtained through the discovery process show that considerable tension existed between Schmidt and his bosses, primarily PT editor-in-chief Stephen Benka. One performance assessment was altered some months after it was originally issued to add descriptions of Schmidt as a malcontent who had a "divisive influence on the staff" and often engaged in "disruptive behavior."

Disciplined Minds argues that the workplace, as well as graduate school, are battlegrounds where highly trained professionals are forced to subordinate their own desires to make a difference in society to the politics of their organization. He offers suggestions for individuals to retain their creative thinking and pursue their social visions within the corporate world.

While it was redacted from the public settlement document, AIP also agreed as part of the settlement to take steps to encourage diversity in its workforce, according to the Washington Lawyers Committee for Civil Rights and Urban Affairs, a nonprofit civil rights organization, and Howrey LLP, a law firm specializing in diversity matters. Both organizations provided Schmidt with legal counsel. AIP said it would support bids by the National Society of Black Physicists (NSBP) and the National Society of Hispanic Physicists to become nonvoting AIP member societies. It also agreed to offer a science-writing course at NSBP's next annual conference, if requested, as a precursor to recruiting talented minority science writers. AIP has also implemented a mandatory program of diversity training for all its employees, according to the law firms.

For his part, Schmidt agreed to remove certain news articles about his experience that he had posted on his website (www.disciplinedminds.com). He also agreed to redact portions of other articles, including one published by the the AIP member American Physical Society (APS) and another that ran in the *Canadian Undergraduate Physics Journal*. The uncensored versions of all the documents,

however, can be read on Mahajan's website, to which Schmidt conveniently provides a link on his home page. Both parties agreed not to disparage the other.

PCAST IS BRIEFED ON PROGRESS ON ETHANOL AND ADVANCED BATTERIES

Preliminary estimates indicate that the United States may be able to meet one-third of its vehicle fuel needs from ethanol that's derived from cellulosic, or woody materials, according to Energy Secretary Samuel Bodman.

Speaking to the President's Council of Advisors on Science and Technology (PCAST), Bodman said that the Department of Energy (DOE) hopes that the 50% increase for spending on ethanol research effort proposed by President Bush for FY-07 will result in a commercial-scale process for converting cellulosic materials into ethanol by 2011. At that point, the United States will be in a position to build a large number of small production plants scattered around the country.

Bodman said that DOE has been working with the US Department of Agriculture on estimating the amount of ethanol that could be produced from available lands. By other estimates, ethanol produced from cellulosic feedstocks could eventually supplant the entire US gasoline consumption. Bodman said that advances in scientific computing have led to the possibility of "programming" microbes to produce ethanol.

Agriculture Secretary Mike Johanns told a Washington conference on March 30 that US ethanol producers are expected to consume 20% of the domestic corn crop by 2012, up from 14% today, as a result of passage of last year's Energy Policy Act. He declined to predict, however, what the limit might be on the percentage of the crop that can be devoted to ethanol.

"When we achieve cost-competitive cellulosic conversion of plant and woody material, we'll be able to spin off new products in a refining process similar to what we have done with ethanol," Johanns said. The process will be able to produce a range of other products with higher profit margins along with ethanol.

In February, Bodman announced the availability of \$160 million in cost-shared funding over three years to build up to three ethanol biorefineries in the United States.

PCAST, which is in the process of drafting a report on alternative energy technologies, heard presentations on advanced batteries from two small companies. Zinc Matrix Technologies is developing a silver-zinc battery as an alternative to lithium-ion cells for military, portable electronics, energy storage, and hybrid vehicle applications. Its president, Ross Dueber, said the United States has fallen far behind other nations in rechargeable battery technology, which, at \$55 billion last year, accounts for 65% of the total world battery

are abandoning the compound as quickly as they can get their hands on ethanol to replace it. That's because they were unable to convince lawmakers to include indemnification for the cleanup of MTBE-tainted drinking water supplies from the energy bill. And a federal mandate for oxygenates in gasoline expires in May, ending refiners' legal last legal argument that they should not have to clean up the mess.

The brochure is available at energy.senate.gov.

IN BRIEF

- A bill to establish a three-tiered prize for achievements that overcome scientific and technical barriers to hydrogen-powered vehicles was introduced last month by Rep. Bob Inglis (R-SC). Patterned after the \$10 million Ansari X Prize that was awarded for the first private-sector trip into space, Inglis' "H-Prize" would provide four \$1 million prizes for technical "breakthroughs" in hydrogen storage, distribution, production, and utilization; \$10 million awards every two years for the development of working prototypes employing the breakthroughs; and a grand prize of up to \$100 million for the entity that meets criteria to be established by the DOE. Inglis would set aside \$5 million a year in federal monies for the prizes, which would also be financed with private sector funds. BMW, which has an assembly plant located in Inglis' district, has said it will sell a limited number of cars capable of running on hydrogen or gasoline in the next couple years.

- The DOE will abolish the Secretary of Energy Advisory Board (SEAB), the independent panel that was established soon after the agency was formed in the mid-1970s, when its charter expires May 20. While Energy Secretary Samuel Bodman is said to like operating with fewer advisers, SEAB's fate may have been sealed with a recent report by a subpanel of the group, which last year called for a major consolidation of the nuclear weapons complex. DOE has yet to act on, or even issue a response to, findings of the panel, which was chaired by David Overskei, president of a San Diego consulting firm.

- In a rare confession, President Bush told an audience recently that he wished he had taken a different approach to address global warming when he first took office. Speaking

to the nonprofit group Freedom House March 29. Bush said he "should have started differently when I first became president and said we will invest in new technologies that will enable us to use fossil fuels in a much wiser way." Bush specifically plugged ethanol, coal, and nuclear power, as well as "hybrid batteries." Bush dropped the Clinton administration's partnership for a new generation of vehicles (PNGV), which was collaborating with automakers to develop a 75 mile-per-gallon family car using new technologies such as plug-in hybrids. He replaced it with his own initiative to develop hydrogen-powered vehicles, which will take considerably longer to develop. Most recently, however, Bush has become enamored with ethanol vehicles, proposing to add 50% to research programs that are trying to find an economical way to produce ethanol from cellulosic materials.

- Hopes for an appreciable increase to President Bush's flat \$28.4 billion Fiscal Year 2007 funding request for the NIH budget receded with the rejection of an amendment to add \$7 billion for health and education programs to the budget resolution approved by the House Budget Committee. The amendment, which was doomed due to its Democratic pedigree (Connecticut Rep. Rosa DeLauro), sought to duplicate the successful effort by NIH Senate patrons Arlen Specter (R-PA) and Tom Harkin (D-IA) to supplement the funding available for programs under the jurisdiction of Specter's NIH appropriations subcommittee, including NIH. The House resolution, however, also included some bad news for physical sciences boosters, who had been popping the corks after Bush announced his "American Competitiveness Initiative" in February. The House resolution would short the budget category for general science, space and technology by \$300 million. Floor consideration of the measure, which sets broad spending lids on appropriators, could come as soon as April 6. (after press time), and Rep. Michael Castle, a moderate Republican from Delaware, has promised to try again to add the \$7 billion.

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